

White paper
September 2010

A8i



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Purpose of this document

Sony Ericsson product White papers are intended to give an overview of a product and provide details in relevant areas of technology.

Document history

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Sony Ericsson Developer World

For the latest Sony Ericsson technical documentation and development tools, go to www.sonyericsson.com/developer

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Table of contents

Product overview	4
Facts – dimensions, weight, performance and networks	4
Full feature list by category	6
Phone specific applications	7
Technologies in detail	8
Device-to-device communications (local)	8
Bluetooth™ wireless technology	8
WLAN	9
Java™	9
Messaging	10
Positioning – location based services	11
Synchronisation (OMA DS, EAS)	11
Multimedia (audio and video)	12
Web browser	13
Trademarks and acknowledgements	14

Product overview

Facts – dimensions, weight, performance and networks










Operating system	OMS 2.0
Size	117 x 59 x 14 mm
Weight	136 grams
Available colours	Black White
Main screen	
Colours	262,144 colour TFT
Resolution	854x480 pixels
Size (diagonal)	3.5 inches
Input mechanisms	
Text input	Quick Text (Zi)
Touch screen	Resistive (single touch)
Handwriting recognition	Yes
Motion sensor	Accelerometer
Memory	
Phone memory	Up to 200 MB
Memory card support	microSD, up to 32GB
Camera	
Camera resolution	5 megapixel
Digital zoom	4x
Photo flash	Yes, LED
Video recording	Yes, MPEG4 (QVGA)
Networks	
A8i	TD 2010-2025 band, TD 1880-1920 band GSM GPRS/EDGE 850, 900, 1800, 1900
Data transfer speeds	
GSM GPRS (Class 10 CS4)	Up to 86 kbps (download). Up to 40 kbps (upload)
GSM EDGE (Class 10 MCS9)	Up to 237 kbps (download). Up to 123 kbps (upload)

UMTS HSPA (cat. 8 download)	TD-HSDPA Cat.15, 2.8 Mbps
Talk time (GSM)	5 hours*
Standby time (GSM)	260 hours*
Talk time (TD-SCDMA)	7 hours 30 min*
Standby time (TD-SCDMA)	260 hours*
Video call time	2 hours 40 min**
Battery	1500 mAh

**According to GSM Association Battery Life Measurement Technique*

***Battery performance may vary depending on network conditions and configuration, and phone usage.*

Full feature list by category

 <p>Camera 5 megapixel camera 4x digital zoom Auto focus Flash / LED Geo tagging Photo flash Photo light Touch focus Video recording</p>	 <p>Music Bluetooth™ stereo (A2DP) Media player Music player Music tones (MP3/AAC) TrackID™ application</p>	 <p>Internet Bookmarks Pan & zoom Web search (from standby) HTML 4.01 XHTML 1.1</p>
 <p>Communication Call list Conference calls Polyphonic ringtones Speakerphone Vibrating alert Video calling</p>	 <p>Messaging Conversations Email Microsoft® Exchange Active-Sync® Handwriting recognition Instant messaging Picture messaging (MMS) Predictive text input Sound recorder Text messaging (SMS) Unified messaging</p>	 <p>Design Auto rotate Light sensor Torch OMS 2.0 Picture wallpaper Proximity sensor Touchscreen</p>
 <p>Entertainment eCompass™ FM radio Java™ Media browser Video streaming Video viewing</p>	 <p>Organiser Alarm clock Calculator Calendar Dictionary Document readers eManual Flight mode Notes Phone book Tasks</p>	 <p>Connectivity 3.5 mm audio jack aGPS Bluetooth™ technology Modem Micro USB Synchronisation USB mass storage USB High speed 2.0 support WLAN</p>

Phone specific applications



Apps

DCD

Fetion™

Mobile Market

Mobile Payment

Mobile TV

Mobile Reader

Mobile Music

Mobile Stock

Mobile Video

Mobile Navigation

Technologies in detail

NOTE: The information outlined below is general and levels of compliance to standards and specifications may vary between products and markets. For more information, contact Sony Ericsson Developers World or your Sony Ericsson contact person where applicable.

Device-to-device communications (local)

Bluetooth™ wireless technology

Bluetooth™ profiles supported	Advanced Audio Distribution Profile Audio/Video Remote Control Profile Generic Access Profile Generic Object Exchange Profile Handsfree Profile Headset Profile Object Push Profile Phonebook Access Profile Service Discovery Application Profile
Core version and supported features	2.1+EDR
Connectable devices	Interoperability and compatibility among Bluetooth™ devices varies. This device generally supports products utilizing Bluetooth spec. 1.1, or higher, and at least one of the profiles above.

More information:

www.sonyericsson.com/developer

www.bluetooth.com

WLAN

WLAN is a popular wireless networking technology that uses radio waves to provide wireless high-speed Internet and network connections. WLAN hotspots exist in an increasing number of locations, for example, airports, hotels, cafés and bistros. If a mobile phone supports WLAN, it can be used to take advantage of high data transfer rates and lower calling costs.

Supported standards	IEEE 802.11g/802.11b GB 15629.11-2003 GB 15629.11-2003/XG1-2006
Connectable devices	WLAN ad-hoc mode
Frequency band	2,4 GHz
Security	Open Open WEP Shared WEP WPA Personal and WPA2 Personal WPA Enterprise and WPA2 Enterprise WAPI
Encryption	WPI-SMS4, RC4, TKIP and AES

Java™

Java™ Platform, Micro Edition	JSR-75 PDA Optional Packages for J2ME™ JSR-82 Bluetooth Wireless Technology API JSR-118 MIDP 2.0 JSR-120 Wireless Messaging API JSR-135 Mobile Media API 1.1 JSR 139 CLDC 1.1 JSR-184 Mobile 3D Graphics API for J2ME™ JSR-205 Wireless Messaging API 2.0 JSR-226 SVG API for J2ME™
Java 3D	JSR-184 Mobile 3D Graphics API for J2ME™

Messaging

(MMS) Multimedia Messaging Service

According to OMA Multimedia Messaging Service V.1.2 + SMIL.

Email

Bearer type (IP)	GSM Data (IP) GPRS and HSCSD
Character sets	GB2312 ISO-8859-1 UTF-8 UTF-16 US-ASCII ISO-8859-2 UTF-7 KOI8-R Windows codepage 1251 ISO-10646-UCS-2 Note: GB2312 is available in Simplified Chinese variants only, that is, Mainland China variants.
OTA provisioning solution	OMA Client Provisioning 1.1
Protocols	POP3 and SMTP
Push email	CMCC push email
Secure email	SSL
HTML mail	Yes

More information: www.sonyericsson.com/developer, www.openmobilealliance.org

Positioning – location based services

Supported standards:

OMA Secure User Plane Location (SUPL) v1.0

Synchronisation (OMA DS, EAS)

OMA Data Synchronisation protocol version 1.1.2

OMA Data Formats: vCard 2.1, vCalendar 1.0

Related information: www.sonyericsson.com/developer

Multimedia (audio and video)

Audio Playback	Decoder format Audio decoding MPEG-1/2/2.5, audio layer 3 AAC, AAC+, eAAC+ WMA version 2,7,8: Class 1 WMA version 9: Level 3	Supported in file format MP3 (.mp3) 3GP (.3gp); AAC (.aac); MP4 (.mp4); M4A (.m4a) WMA (.wma) WMA (.wma)
Audio Recording	Encoder format AMR-NB	Supported in file format AMR (.amr)
Video Playback	Decoder format MPEG-4 Visual Simple Profile H.264 Baseline Profile H.263 Profile 0	Supported in file format 3GP (.3gp); MP4 (.mp4) 3GP (.3gp); MP4 (.mp4) 3GP (.3gp)
Video Recording	Encoder format MPEG-4 QVGA@30fps. Support file format is only 3GP (.3gp).	Supported in file format 3GP (.3gp)
Audio/Video Streaming	Streaming transport	RTSP according to 3GPP™

Web browser

Browser version	AppleWebKit 528.5+
Bookmarks	Folders and sorting supported
Navigation/rendering	Pan & Zoom Landscape/portrait rendering Full page PC rendering
Search	Internet Search Find on page
Browser compliancy	HTML version. 4.01 XHTML Basic version 1.0 XHTML version 1.1 XHTML Mobile Profile version 1.1 WML 1.3 CSS 2.1 WCSS Version 26-Oct-2001 ECMA-script 262 3rd edition ECMAScript Mobile Profile 1.0 HTTPXMLRequest AJAX
Protocol Compliancy	HTTP/1.1 TLS 1.0 and SSL 3.0 OMA Download 1.0

Related information: www.access-company.com/products/mobile_solutions

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